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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Refael Aharon

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EXAMINER

CHEN, CATHERYNE

ART UNIT

PAPER NUMBER

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/566,517	<b>Applicant(s)</b> AHARON, REFAEL	
	<b>Examiner</b> CATHERYNE CHEN	<b>Art Unit</b> 1655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8,9,12-14,16,17 and 20-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8,9,12-14,16,17 and 20-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

The Amendments filed on Nov. 17, 2008 has been received and entered. Currently, Claims 1, 3-6, 8-9, 12-14, 16-17, 20-27 are pending. Claims 1, 3-6, 8-9, 12-14, 16-17, 20-27 are examined on the merits. Claims 2, 7, 10-11, 15, 18-19 are canceled.

The Petition For Revival has been granted on Jan. 19, 2009.

### ***Election/Restrictions***

Applicant's election of the species labiatae family in Claim 8 in the reply filed on April 26, 2007 is acknowledged.

### ***Response to Arguments***

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3-6, 8-9, 12-14, 16-17, 20-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davey et al. (Anal. Biochem., 1996, vol. 239, pages 8-19), Laugharn, Jr. et al. (US 6270723 B1), Rooks et al. (US 2004/0265451 A1), Bracco et al.

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(US 4352746), and Shibantai et al. (US 4732759) for the reasons set forth in the previous Office Action, which is set forth below. All of Applicant's arguments regarding this ground of rejection have been fully considered but are not persuasive.

Davey et al. teaches pulverizing plant tissue in liquid nitrogen, extracted in 3% metaphosphoric acid, centrifuged, pass through cartridge, then eluate is injected (Methods). However, it does not teach freeze-defrost cycles, plant materials, Labiatae family, natural colorant, flavoring, aromatic, freeze drying, and micron size.

Laugharn, Jr. et al. teaches sterilizing procedure of freezing and thawing (column 1, lines 51-54), where the material being sterilized can be a foodstuff, a pharmaceutical preparation (column 2, lines 61-64) at temperature from about -40 to about 95 degree Celsius (column 2, lines 15-17).

Rooks et al. teaches freezing fruit and grinding the frozen material into particles having a size less than 750 microns (paragraph 0004) to make food powders such as beverages, natural coloring (paragraph 0037). Water may be removed from the powder by freeze drying the powder (paragraph 0035).

Bracco et al. teaches ground vegetable material from leaves, flowers, fruits, roots, rhizomes, plants from Labiatae family, rosemary, sage, origanum, marjoram, thyme (column 2, lines 8-23), where substances are extracted with organic solvents or oils (column 1, lines 36-38), then the substances are used for food such as milk powder, cosmetic products (column 5, lines 36-38, 48).

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Shibanai et al. teaches medicinal herbs used in cosmetics produced by freezing method (column 2, lines 54, 57-58) from lavender and chlorophyll (column 5, lines 13, 18, 21).

The references also do not specifically teach process claimed by applicant. These processes are well known in the art to be acceptable means of processing plant materials and sterilizing the product. Repeated freezing and thawing cycle to extract a liquid and solid from the plant material is an efficient way to extract. Upon noticing that the plant material is not consistently grinded, it would be reasonable to repeat the process so as to increase yield of the extract from the plant material. Based on this knowledge, a person of ordinary skill in the art would have had a reasonable expectation that combining the processes of freezing plant materials and the repeated freeze-thaw methods taught by the references in the claimed forms would be successful. Therefore, an artisan of ordinary skill would have been motivated to perform the process as taught by the reference in the forms claimed by applicant. In addition, the size of the plant solid affects the extraction and freezing processes. The smaller the particle size will increase the extraction surface and decrease the time to freeze the material. Based on this knowledge, a person of ordinary skill in the art would have had a reasonable expectation that combining the processes of freezing plant materials and the particle sizes taught by the references in the claimed forms would be successful. Therefore, an artisan of ordinary skill would have been motivated to perform the process as taught by the reference in the forms claimed by applicant.

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The references also do not specifically teach performing the process in the time span and temperature range claimed by applicant. The process in the time span and temperature range is clearly a result effective parameter that a person of ordinary skill in the art would routinely optimize. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). Thus, optimization of general conditions is a routine practice that would be obvious for a person of ordinary skill in the art to employ. It would have been customary for an artisan of ordinary skill to determine the optimal process in the time span and temperature range to use in order to best achieve the desired results. Thus, absent some demonstration of unexpected results from the claimed parameters, this optimization of ingredient amount would have been obvious at the time of applicant's invention.

The references also do not specifically teach process claimed by applicant. These processes are well known in the art to be acceptable means of processing plant materials and sterilizing the product. Based on this knowledge, a person of ordinary skill in the art would have had a reasonable expectation that combining the processes of freezing plant materials and the repeated freeze-thaw methods taught by the references in the claimed forms would be successful. Therefore, an artisan of ordinary skill would have been motivated to perform the process as taught by the reference in the forms claimed by applicant. In addition, the size of the plant solid affects the extraction and freezing processes. The smaller the particle size will increase the extraction surface

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and decrease the time to freeze the material. Based on this knowledge, a person of ordinary skill in the art would have had a reasonable expectation that combining the processes of freezing plant materials and the particle sizes taught by the references in the claimed forms would be successful. Therefore, an artisan of ordinary skill would have been motivated to perform the process as taught by the reference in the forms claimed by applicant.

The references teach process for plants. Labiatae family are plants. Therefore the methods use to process the plants can be transferred to the Labiatae family plants. This reasonable expectation of success would motivate the artisan to use the process taught in the reference composition. Thus, using Labiatae family plant is considered an obvious modification of the references.

In cosmetics, chlorophyll is used as coloring matters. Plants have chlorophyll. Based on this knowledge, a person of ordinary skill in the art would have had a reasonable expectation that combining the chlorophyll of plant materials into cosmetics taught by the references in the claimed forms would be successful. Therefore, an artisan of ordinary skill would have been motivated to combining the chlorophyll of plant materials into cosmetics as taught by the reference in the forms claimed by applicant.

Applicant argues that the fast deep-freeze and fast defrost steps are not taught.

In response to Applicant's argument, Laugharn, Jr. et al. teaches sterilizing procedure of freezing and thawing (column 1, lines 51-54) at temperature from about – 40 to about 95 degree Celsius (column 2, lines 15-17) and Davey et al. teaches pulverizing plant tissue in liquid nitrogen (Methods). The steps can be combined to

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achieve the desired result of sterilization. Thus, deep freezing and thawing at 95 degree Celsius or boiling will result in sterilizing the liquid.

Applicant argues that the references teach away from the invention.

Applicant's invention is drawn toward a process of separating a plant material by freezing. Davey et al. teaches pulverizing plant tissue in liquid nitrogen, extracted in 3% metaphosphoric acid, centrifuged, pass through cartridge, then eluate is injected (Methods). Laugharn, Jr. et al. teaches sterilizing procedure of freezing and thawing (column 1, lines 51-54), where the material being sterilized can be a foodstuff, a pharmaceutical preparation (column 2, lines 61-64) at temperature from about -40 to about 95 degree Celsius (column 2, lines 15-17). Rooks et al. teaches freezing fruit and grinding the frozen material into particles having a size less than 750 microns (paragraph 0004) to make food powders such as beverages, natural coloring (paragraph 0037). Water may be removed from the powder by freeze drying the powder (paragraph 0035). The references teach freezing plants to extract something; thus, the references do not teach away from the invention.

As to Laugharn, Jr. teaching away from the invention, the reference recognizes that the speed of freezing and thawing affects the sterilization process. Thus, adjusting for freezing and thawing time, volume, pressure, etc. would be parameters that one of ordinary skill in the art would optimize to achieve the desired result. Thus, the reference does not teach away.

Applicant argues that hindsight is used.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to CATHERYNE CHEN whose telephone number is (571)272-9947. The examiner can normally be reached on Monday to Friday, 9-5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terry McKelvey can be reached on 571-272-0775. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Catheryne Chen  
Examiner Art Unit 1655

/Michael V. Meller/

Primary Examiner, Art Unit 1655